Jinming Chen
Email: CHJM2024@163.com | Tel: +86 18118384250

EDUCATION

The University of Hong Kong   Hong Kong SAR, China
MSc in Computer Science   2024/09 - 2025/07

Nanjing University of Posts and Telecommunications (NJUPT)   Nanjing, China
B.E. in Computer Science and Technology, Bell Honors School   2020/09-2024/06

- **GPA**: 3.92/5.0(Avg.Score:88.6/100)
  Relevant Courses: Operating System (99), Database Systems (93), Java Programming (A), Python and AI (A), Advanced Language Programming (92), Linear Algebra and Analytic Geometry (93)

PUBLICATION & PATENTS

Publication

[1] Wangyoyo Li, Youwei Tian, **Jinming Chen**, Fanghui Hu, "Numerical simulation of the radiation properties of a high-energy electron influenced by linear polarized laser pulse," Proc. SPIE 12792, *Eighteenth National Conference on Laser Technology and Optoelectronics*, 1279216 (2023).

[2] AI Agents for Learning: A Survey with Safety and Trustworthiness Perspective
Co-Author
- Contributed to the writing of a comprehensive survey on **educational AI agents**, focusing on reviewing the challenges and solutions in **safety, privacy, fairness & bias, and transparency & accountability**.
- Conducted literature review to identify key problems and mainstream solutions in AI agents, compared approaches in education and general contexts, composed relevant sections
- Designed and produced embedded diagrams and references to improve readability, logical flow and clarity

Patent

[1] Jing Xue, Shoudong Zhao, Chengyu Lv, **Jinming Chen**. "An Automatic Scoring System of Microsoft Office Operation Questions based on the Similarity of XML Documents", CN Patent 2024 1 0091386.5, April 2024.

RESEARCH PROJECTS

WAN2.1–1.3B Model Development Group   2025/?? - Present
This project aims to make the WAN2.1–1.3B model compatible with and capable of generating high-resolution video and optimize the original model, which only generates 480p resolution video.
Research Assistant
- Contributed to research on **WAN2.1–1.3B generative models**, focusing on methods for video generation and model optimization
- Investigated how **DiffSynth** can be applied to train WAN2.1, analyzing training strategies and performance outcomes
- Wrote code to train WAN2.1 under the **DreamBooth base framework**, ensuring reproducibility and scalability

Adversarial Prompt Generation for Robustness Testing of Text-to-Human-Object Interaction Models
Summer Research Intern | Advisor: Professor Muchao Ye, University of Iowa   2024/07 - Present
- Joined a project that investigates training prompts that let the models generate Not-Safe-For-Work (NSFW) responses in ignorance of the detection of the LLMs, including T2T, T2I and T2M (motions) models
- Read several papers about adversarial attacks against Diffusion Models and have successfully implemented a methodology of the paper "A Pilot Study of Query-Free Adversarial Attack against Stable Diffusion"

- Currently reading the paper "A Wolf in Sheep's Clothing: Generalized Nested Jailbreak Prompts Can Fool Large Language Models Easily" and trying to prove the outcome of the experiment. Aiming to follow the research and develop new methodology for this topic

Design and Implementation of Office Operation Practice Software   2022/06 - 2024/06
Undergraduate Thesis, Core Research Team Member   **Patent [1]**

- Designed and implemented automatic scoring methods for Microsoft Office operation tests using Python
- Computed text similarity between XML documents using Tree Edit Distance for scoring
- Collected and systematically screened information using university resources to support the project
- Built an interactive interface using PyQt5

Dynamics and Radiation Characteristics of High-Energy Particles in a Strong Laser Field
       2021/05 - 2023/05
Research Team Leader   **Publication [1]**
- Led a research team to study the influence of initial phase on the 3D radiation of high-energy electrons in a tightly focused, linearly polarized laser field
- Designed the software structure and implemented MATLAB code to model the physical mechanism
- Coordinated the project's progress and assigned research tasks to project team members
- Processed the data and co-authored the paper

Analysis and Design of Algorithms   2023/03 - 2023/06
Course Project
- Completed experiments on the "N-queens Problem" and continuously optimized the algorithm
- Implemented bit representation and bit manipulation, greatly reducing the algorithm's computational complexity by representing columns and diagonals with bits

WORK EXPERIENCE

Hangzhou Jixin Technology Co., Ltd.   Hangzhou, China
Software Development Intern   2023/07 - 2023/08
- Developed ERP software for managing cross-border e-commerce logistics orders
- Designed and implemented database interaction methods using object-relational mapping(ORM)
- Researched data analytics techniques and implemented functions in Java and Python for e-commerce data retrieval and analysis
- Developed a data visualization module using Pandas and Dash, providing an intuitive data dashboard for customer decision-making

Zhejiang Boxin Software Information Technology Co., Ltd.   Wenzhou, China
Research & Development Intern   2022/07 - 2022/08
- Developed a battery management system for smart robotics to enhance temperature stability and energy efficiency
- Conducted a comprehensive literature review on battery charging strategies, time-series data analysis methods, cooling systems, and temperature sensor parameters
- Constructed a battery temperature model under various conditions and leveraged time-series data analysis to predict the temperature variations to select efficient charging/energy consumption strategies

COMPETITIONS & HONORS
Second Prize | The 13th National Collegiate Mathematics Competition (non-mathematics track)
Second Prize | "Lanqiao Cup" National Competition for Software and IT Professionals, Jiangsu Division

EXTRACURRICULAR ACTIVITIES

Member | NJUPT Student Union, Department of Academic Innovation   2020/10 - 2021/06
Member | Science and Technology Association of Institute of Automation   2020/10 - 2021/05
Athlete, Men's 4*100m Relay | The 52nd Athletics Games of NJUPT   2021/11
Volunteer | The 79th Anniversary Run of NJUPT   2021/04

SKILLS

Programming & Software: Proficient in C, Python, Java, Overleaf, Colab, etc
Language: IELTS Band Score: 7